

HIGH TEMPERATURE SUPER-CONDUCTING SYNCHRONOUS ROTOR
COIL SUPPORT WITH TENSION RODS AND METHOD FOR
ASSEMBLY OF THE COIL SUPPORT

ABSTRACT OF THE DISCLOSURE

A rotor for a synchronous machine is disclosed comprising: a rotor; a super-conducting coil winding extending around at least a portion of the rotor, said coil winding having a pair of side sections on opposite sides of said rotor; at least one tension rod extending between the pair of side sections of the coil winding and through conduits in said rotor; and a coil housing at each of opposite ends of said tension rod, wherein said coil housing wraps around said coil winding and is attached to said tension rod.